

ABSTRACT OF THE DISCLOSURE

A voltage-driven power semiconductor device includes a voltage-driven IEGT chip, a collector electrode plate, an emitter electrode plate, and an inductance material. The collector electrode plate is connected to the collector of the IEGT chip, and press-contacts the IEGT chip from its collector side. The emitter electrode plate press-contacts the IEGT chip from its emitter side. The inductance material has an inductance component and connects the emitter of the IEGT chip and the emitter electrode plate. In the voltage-driven power semiconductor device having this arrangement, an induced electromotive force is generated in the inductance material arranged between the emitter of the IEGT chip and the emitter electrode plate. This induced electromotive force can suppress a steep current change (di/dt) upon an OFF operation, and can further suppress a steep voltage change (dv/dt) caused by the current change (di/dt).